

# MAVEN Archive Process: ITF Perspective

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## **Background Specific to MAVEN**

- Prior experience with PDS varied widely, from none to PDS3.
- Some had previous experience with Heliophysics. These people felt that format constraints and documentation in Heliophysics are less burdensome.
- Early estimates of archiving effort were based on previous missions. Since we had a wide range of previous experience, early estimates also varied widely. **This is a key area for improvement.**

## **Archiving Process**

- Archiving task was primarily between PDS node representatives and instrument teams, with SDWG providing overall coordination.
- SDWG normally meets once per week

## Lessons Learned

### 1. Better early planning and a realistic schedule.

- Look at the big picture → Where do archiving tasks fit within the overall work flow?

	Launch			
Mission	Phase C/D	Cruise	Transition	Science
Software	Instrument -> L0	L0 -> L1 -> L2	Pipeline	Production
Archiving	Groundwork*	SIS, Peer Reviews	Pipeline	Production

\* File naming, Directory structure, Interfaces, Formats, Templates, Scheduling

### 2. First Interaction

- Lay out archiving tasks
- Establish realistic schedule **that meshes with the mission work flow** and meets archiving requirements
- Identify tasks that can and should be done early (next slide)

## **Lesson Learned**

### **3. Key tasks/decisions that needed early attention:**

- File naming convention, directory structure, versioning, and time standards
- Archive formats → adoption of CDF and generation of “white paper” describing the constraints specific to PDS. Early interaction with Space Physics Data Facility (SPDF) would have helped.
- A clear definition for “raw” data, in the context of an archive product for PDS, and the constraints on producing such an archive

### **4. Focus on what it takes to play a more active role in providing data to the science community**

- Adopt file formats used/preferred by the science community (check!)
- Adopt the same directory structure as the Science Data Center (allows the PDS to “plug in” to the science analysis software)